

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-4. (Cancelled)

5. (Previously presented) The process of Claim 8 where at least one Agent in the treatment Fluid is an alkanolamine, comprising from 2 to 6 carbon atoms.

6. (Previously presented) The process of Claim 8 where at least one Agent is selected from the group consisting of ethanolamine; diethanolamine; diisopropanolamine; triethanolamine; N-methyldiethanolamine; piperazine; N-methylpiperazine; N-hydroxyethylpiperazine; 2-(2-aminoethoxy)ethanol; 2-(2-tert.-butylaminoethoxy)ethanol; and 2-amino-2-methyl-1-propanol

7. (Previously presented) The process of Claim 5 where, included in the Fluid, is at least one co-solvent for acid gases selected from the group of:

- a) methanol; and
- b) C₁-C₃ alkyl mono- and di- ethers of ethylene, diethylene, triethylene, tetraethylene, pentaethylene, hexaethylene, heptaethylene, octaethylene, nonaethylene, and undecaethylene glycol; and
- c) propylene carbonate; 1,3-dimethyl-3,4,5,6-tetrahydro-2(1H)-pyrimidinone; sulfolane; 1-methyl-2-pyrrolidinone; morpholine; N-formylmorpholine; and N- acetylmorpholine.

8. (Currently amended) A regeneration Process for an aqueous, acid gas-rich absorption Fluid comprising at least one nitrogen-based chemical absorbing Agent for an acid gas, which absorption Fluid contains a chemically absorbed acid gas comprising a) hydrogen sulfide, b) carbon dioxide or c) both of said gases, said Process comprising 1) stripping acid gas from the acid gas-rich absorption Fluid in a pressure Vessel operated at essentially a single pressure in excess of about 50 psia and below about 300 psia, wherein heat is supplied to the Fluid in the Vessel by a reboiler in a sufficient quantity that the Fluid is at a temperature in excess of 280°

from 294°F and below 400°F, and thereafter 2) recovering an acid gas-rich gas stream from the Vessel while maintaining the stream under said pressure, and 3) introducing said gas stream into a first stage compressor, and 4) thereafter reducing by compression the volume of said gas stream.

9. (Original) The process of Claim 8, where the gas stream is, after compression, disposed by injection to an ocean- or sea-bed or into a subterranean chamber or formation.
10. (Cancelled)
11. (Previously presented) The process of Claim 6 where, included in the Fluid, is at least one co-solvent for acid gases selected from the group of:
 - a) methanol; and
 - b) C₁-C₃ alkyl mono- and di- ethers of ethylene, diethylene, triethylene, tetraethylene, pentaethylene, hexaethylene, heptaethylene, octaethylene, nonaethylene, and undecaethylene glycol; and
 - c) propylene carbonate; 1,3-dimethyl-3,4,5,6-tetrahydro-2(1H)-pyrimidinone; sulfolane; 1-methyl-2-pyrrolidinone; morpholine; N-formylmorpholine; and N- acetylmorpholine.
12. (Cancelled)
13. (Previously presented) The process of Claim 8 wherein the stripping acid gas from the acid gas-rich absorption Fluid takes place in a pressure Vessel at a pressure in excess of about 55 psia and below about 300 psia.
14. (Previously presented) The process of Claim 8 wherein the stripping acid gas from the acid gas-rich absorption Fluid takes place in a pressure Vessel at a pressure in excess of about 130 psia and below about 300 psia.
15. (Previously presented) The process of Claim 8 wherein the stripping acid gas from the acid gas-rich absorption Fluid takes place in a pressure Vessel at a pressure in excess of about 50 psia and below about 200 psia.

16. (Previously presented) The process of Claim 8 wherein the stripping acid gas-rich absorption Fluid takes place in a pressure Vessel at a pressure in excess of about 50 psia and below about 155 psia.